DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently amended): A method for coordinating the operation of a database management system and a common language runtime executing on a common server, said method comprising:

~~hosting the common language runtime on the database management system; and~~

~~executing~~ receiving a request ~~requests by~~ from the common language runtime for at least one system resource via an application programming interface of the database management system;

interpreting said request to determine at least one action to be performed;

transmitting a request to the server via the database management system when said at least one action requires communication with the common server; and

returning a response to the common language runtime via said application programming interface of the database management system.

Claim 2 (Original): The method of claim 1 wherein said at least one system resource is a memory resource.

Claim 3 (Previously presented): The method of claim 2 wherein

said common language runtime requests a memory resource via the application programming interface of the database management system,

said database management system coordinates the request with:

at least one other request on a memory management system for said database management system, and

a current state of memory on the database management system,

to ensure the database management system and the common language runtime use only physical memory to execute said requests.

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Claim 4 (Previously presented): The method of claim 2 wherein said common language runtime requests a memory resource via the application programming interface of the database management system, and the database management system manages the request to allocate a block of physical memory where, had the common language runtime requested said memory resource directly from an associated operation system, the common language runtime would have been allocated a block of virtual memory.

Claim 5 (Original): The method of claim 1 wherein said database management system requests an allocation of memory from an associated operating system where said request is made on behalf of said common language runtime.

Claim 6 (Original): The method of claim 1 wherein said at least one system resource is an execution of a first thread.

Claim 7 (Previously presented): The method of claim 6 wherein said common language runtime requests an execution of a first thread via the application programming interface of the database management system, and the database management system manages the request to assign the first thread to a processor, ensure the first thread is the only thread executing on that processor, and execute the first thread non-preemptively where, had the common language runtime requested said execution of said first thread directly from an associated operation system, the first thread would have been allocated to a processor preemptively and may not have been the only thread executing on that processor.

Claim 8 (Original): The method of claim 1 wherein said database management system requests an execution of a first thread from an associated operating system where said request is made on behalf of said common language runtime.

Claim 9 (Original): The method of claim 1 wherein said at least one system resource is a secured data resource.

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Claim 10 (Previously presented): The method of claim 9 wherein said common language runtime requests a secured data resource via the application programming interface of the database management system, and the database management system manages the request to grant or deny access to said data resource based on a predefined criteria.

Claim 11 (Original): The method of claim 1 wherein said database management system requests a secured data resource from an associated operating system where said request is made on behalf of said common language runtime.

Claim 12 (Original): The method of claim 1 further comprising said database management system providing the common language runtime with a security policy that governs:

whether a set of resources can be accessed by an execution code running in said common language runtime; and

whether a set of operations can be performed by said execution code running in said common language runtime.

Claim 13 (Original): The method of claim 12 further comprising said database management system enabling said execution code to specify a set of Code Access Security (CAS) permissions that are used by the database management system to:

determine whether said execution code is permitted to access a specific resource outside of the control of the database management system; and

specify whether said execution code is permitted to perform operations that are identified as potentially compromising a measurement of robustness of a process operating in said database management system.

Claim 14 (Original): The method of claim 13 further comprising:

setting up a security policy that governs the common language runtime; and

enforcing the set of Code Access Security (CAS) permissions.

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Claim 15 (Currently amended): A system for coordinating the operation of a database management system and a common language runtime executing on a common server, said system comprising:

~~a subsystem by which the database management system hosts the common language runtime, and~~

at least one [[a]] subsystem ~~by which~~ configured to receive a request from the common language runtime ~~executes requests~~ for at least one system resource via an application programming interface of the database management system;

at least one subsystem configured to interpret said request to determine at least one action to be performed;

at least one subsystem configured to transmit a request to the server via the database management system when said at least one action requires communication with the common server; and

at least one subsystem configured to return a response to the common language runtime via said application programming interface of the database management system.

Claim 16 (Original): The system of claim 15 wherein said at least one system resource is a memory resource.

Claim 17 (Previously presented): The system of claim 16 further comprising a subsystem whereby:

said common language runtime requests a memory resource via the application programming interface of the database management system,

said database management system coordinates the request with:

at least one other request on a memory management system for said database management system, and

a current state of memory on the database management system,

to ensure the database management system and the common language runtime use only physical memory to execute said requests.

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Claim 18 (Previously presented): The system of claim 16 wherein said common language runtime requests a memory resource via the application programming interface of the database management system, and the database management system manages the request to allocate a block of physical memory where, had the common language runtime requested said memory resource directly from an associated operation system, the common language runtime would have been allocated a block of virtual memory.

Claim 19 (Original): The system of claim 15 wherein said database management system requests an allocation of memory from an associated operating system where said request is made on behalf of said common language runtime.

Claim 20 (Original): The system of claim 15 wherein said at least one system resource is an execution of a first thread.

Claim 21 (Previously presented): The system of claim 20 wherein said common language runtime requests an execution of a first thread via the application programming interface of the database management system, and the database management system manages the request to assign the first thread to a processor, ensure the first thread is the only thread executing on that processor, and execute the first thread non-preemptively where, had the common language runtime requested said execution of said first thread directly from an associated operation system, the first thread would have been allocated to a processor preemptively and may not have been the only thread executing on that processor.

Claim 22 (Original): The system of claim 15 wherein said database management system requests an execution of a first thread from an associated operating system where said request is made on behalf of said common language runtime.

Claim 23 (Original): The system of claim 15 wherein said at least one system resource is a secured data resource.

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Claim 24 (Previously presented): The system of claim 23 wherein said common language runtime requests a secured data resource via the application programming interface of the database management system, and the database management system manages the request to grant or deny access to said data resource based on a predefined criteria.

Claim 25 (Original): The system of claim 15 wherein said database management system requests a secured data resource from an associated operating system where said request is made on behalf of said common language runtime.

Claim 26 (Original): The system of claim 15 further comprising a subsystem by which said database management system provides the common language runtime with a security policy that governs:

whether a set of resources can be accessed by an execution code running in said common language runtime; and

whether a set of operations can be performed by said execution code running in said common language runtime.

Claim 27 (Original): The system of claim 26 further comprising a subsystem for said database management system to enable said execution code to specify a set of Code Access Security (CAS) permissions that are used by the database management system to:

determine whether said execution code is permitted to access a specific resource outside of the control of the database management system; and

specify whether said execution code is permitted to perform operations that are identified as potentially compromising a measurement of robustness of a process operating in said database management system.

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Claim 28 (Original): The system of claim 27 further comprising:

a subsystem for setting up a security policy that governs the common language runtime; and

a subsystem for enforcing the set of Code Access Security (CAS) permissions.

Claim 29 (Currently amended): A computer-readable medium comprising computer-readable instructions for coordinating the operation of a database management system and a common language runtime executing on a common server, said computer-readable instructions comprising instructions for:

~~hosting the common language runtime on the database management system, and executing requests by~~ <ins>receiving a request from</ins> the common language runtime for at least one system resource via an application programming interface of the database management system[[,]]<ins>;</ins>

<ins>interpreting said request to determine at least one action to be performed;</ins>

<ins>transmitting a request to the server via the database management system when said at least one action requires communication with the common server; and</ins>

<ins>returning a response to the common language runtime via said application programming interface of the database management system.</ins>

Claim 30 (Original): The computer-readable instructions of claim 29 further comprising instructions whereby at least one system resource is a memory resource.

Claim 31 (Previously presented): The computer-readable instructions of claim 30 further comprising instructions whereby:

said common language runtime requests a memory resource via the application programming interface of the database management system,

said database management system coordinates the request with:

at least one other request on a memory management system for said database management system, and

a current state of memory on the database management system,

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

to ensure the database management system and the common language runtime use only physical memory to execute said requests.

Claim 32 (Previously presented): The computer-readable instructions of claim 30 further comprising instructions whereby common language runtime requests a memory resource via the application programming interface of the database management system, and the database management system manages the request to allocate a block of physical memory where, had the common language runtime requested said memory resource directly from an associated operation system, the common language runtime would have been allocated a block of virtual memory.

Claim 33 (Original): The computer-readable instructions of claim 29 further comprising instructions whereby database management system requests an allocation of memory from an associated operating system where said request is made on behalf of said common language runtime.

Claim 34 (Original): The computer-readable instructions of claim 29 further comprising instructions whereby at least one system resource is an execution of a first thread.

Claim 35 (Previously presented): The computer-readable instructions of claim 34 further comprising instructions whereby said common language runtime requests an execution of a first thread via the application programming interface of the database management system, and the database management system manages the request to assign the first thread to a processor, ensure the first thread is the only thread executing on that processor, and execute the first thread non-preemptively where, had the common language runtime requested said execution of said first thread directly from an associated operation system, the first thread would have been allocated to a processor preemptively and may not have been the only thread executing on that processor.

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Claim 36 (Original): The computer-readable instructions of claim 29 further comprising instructions whereby database management system requests an execution of a first thread from an associated operating system where said request is made on behalf of said common language runtime.

Claim 37 (Original): The computer-readable instructions of claim 29 further comprising instructions whereby at least one system resource is a secured data resource.

Claim 38 (Previously presented): The computer-readable instructions of claim 37 further comprising instructions whereby common language runtime requests a secured data resource via the application programming interface of the database management system, and the database management system manages the request to grant or deny access to said data resource based on a predefined criteria.

Claim 39 (Original): The computer-readable instructions of claim 29 further comprising instructions whereby database management system requests a secured data resource from an associated operating system where said request is made on behalf of said common language runtime.

Claim 40 (Original): The computer-readable instructions of claim 29 further comprising instructions whereby said database management system provides the common language runtime with a security policy that governs:

whether a set of resources can be accessed by an execution code running in said common language runtime; and

whether a set of operations can be performed by said execution code running in said common language runtime.

Claim 41 (Original): The computer-readable instructions of claim 40 further comprising instructions whereby said database management system enables said execution code to specify a set of Code Access Security (CAS) permissions that are used by the database management system to:

DOCKET NO.: MSFT-3028/307006.01
Application No.: 10/776,371
Office Action Dated: February 8, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

determine whether said execution code is permitted to access a specific resource outside of the control of the database management system; and

specify whether said execution code is permitted to perform operations that are identified as potentially compromising a measurement of robustness of a process operating in said database management system.

Claim 42 (Original): The computer-readable instructions of claim 41 further comprising instructions for:

setting up a security policy that governs the common language runtime, and

enforcing the set of Code Access Security (CAS) permissions.